

# takepart

## Is It Time to Reconsider Farmed Salmon?

Fish farmers are shifting to more-sustainable practices to lure back consumers.



(Photo: Nick Norman/Getty Images)



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Celebrity chef Rick Moonen was a champion of sustainable seafood long before it was cool. When swordfish stocks were in trouble more than a decade ago, he dove into the “Give Swordfish a Break” campaign and whisked the fish off his menu. Chilean sea bass? Poof. Gone. When wild salmon wasn’t in season, the chef would turn to sustainably farmed arctic char as a substitute.

Today there’s a notable change to his menu: It now proudly includes farmed salmon.

For many who care deeply about sustainable seafood, farmed salmon was likely their gateway fish. The issues surrounding it are easy to grasp, including antibiotic and pesticide use, disease, and sea lice infestations that don’t stay contained at the farm level but can negatively affect nearby wild species. And let’s not forget the granddaddy of all farmed salmon

controversies: AquaBounty's push to farm genetically modified salmon. Approvals for that are still lingering in FDA limbo.

For more than a decade, the fish has been the poster child for what ails aquaculture. For many seafood eaters, the story has been frozen there. Opinions have been solidified, in part, because the problems that have dogged farmed salmon's reputation since the beginning largely exist today.

While it may not be a profound sea change, a definable turn has been happening in the farmed salmon industry over the last few years that Moonen and others say merits a closer look. Indeed, examples of change are plentiful.

Last month, the first [farmed salmon](#) to be approved by the Aquaculture Stewardship Council for responsible stewardship hit the North American market. If you're familiar with the MSC certification logo carried by wild seafood, the ASC is doing similar standards certification for farmed salmon, with guidelines that [took eight years](#) to develop and include more than 150 measures that touch on the usual hot points: escape, feed, pollution. With ASC-certified farmed salmon starting to reach markets, it's a sustainability label consumers can expect to see more of in the near future.

Another farmed salmon change worth noting belongs to Verlasso. The company is a partnership between DuPont and AquaChile and is working to find solutions to one of the industry's most persistent problems—its dependency on forage fish used in salmon feed.

Verlasso is using genetic modification to combine an omega 3-producing algae and a yeast used to feed the salmon, reducing its reliance on forage fish. Its technology and transparency earned it a coveted "[good alternative](#)" from the Monterey Bay Aquarium's Seafood Watch program—not the highest score of "best choice," but the rating is nonetheless a first for an ocean-raised farmed salmon.

Other businesses are focused on the issue of escapes, including the costly solution of growing farmed Atlantic salmon in land-based pens. For some, [like this Canadian](#) company, it seems to be working.

There are salmon farms addressing sea lice concerns with creative solutions, ranging from “cleaner fish” that nibble lice off the skin of penned salmon to strategically placed strands of bivalves that scientists hope will filter sea lice larvae before they can grow enough to become a problem.

Other scientists, such as Thierry Chopin, a Canadian marine biologist at the University of New Brunswick, are working on creating entire ecosystems around salmon farms. It’s known as [integrated multi-trophic aquaculture](#). The idea is to use a system of seaweeds to absorb nitrogen and phosphorus, and bivalves that filter the water. This kind of system takes advantage of what Chopin calls synergistic interactions. The result? Cleaner, healthier fish farms, with a bonus: increased food production. You have to admit, it sounds kind of awesome.

Not all problems that plague salmon farming have solutions on the horizon, which prevent farmed salmon from being embraced by sustainable seafood lovers. For one, it’s primarily a commodity product. Pick up a frozen fillet in a store and its label will tell you if it came from Scotland or Chile, but only rarely will you be privy to the name of the farm where it was raised or any specifics about the farm’s practices.

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RICK MOONEN

Escapes are still a frequent and troublesome occurrence. More than a quarter million fish were set free after a February storm walloped a salmon farm in Ireland. Several pens broke loose from the farm's mooring, and whoosh, the fish were loose in the cold Atlantic Ocean. It was the biggest escape in Ireland's history and a vivid reminder of why farmed salmon continues to have a less-than-shiny reputation.

Set-in-stone listings on environmental guides have added to farmed salmon's tarnished reputation. Although Seafood Watch is expected to release its new report cards on farmed salmon in May or June, the fact is, those reports haven't had a full, complete update since 2005. With [only two exceptions](#), farmed salmon has remained squarely in the "red avoid" category—a long-standing blanket no-no for many eaters.

"If you go back 10 to 12 years, the red listing for farmed salmon was a shot across the bow to the farmed salmon industry," says George Leonard, chief scientist at Ocean Conservancy. "And my sense is that message has been received. It shook the industry and brought them to the table."

Peter Bridson, aquaculture research manager for Seafood Watch, is tight-lipped on whether or not the "red avoid" designation will stand when the new reports are published. But he did say that this time around, they'll be broken up into major production regions: Norway, Chile, Scotland, and British Columbia, where most of the world's farmed salmon is produced.

"The science is changing," Bridson says. "There's better data availability, but it's still difficult to pin down the impacts. It's very important that we get it right."

The problems, he says, vary by region. For example, worries over escapement—the number of fish that escape fisheries and spawn—are different in Norway or Scotland, where Atlantic salmon are the native species.

“It’s a very different set of potential impacts than if [escape] occurs in British Columbia or Chile, where it’s nonnative,” Bridson says. “In terms of pesticide use, we have new criteria now. Pesticide use is still a problem in Scotland, Norway, and Chile too, while British Columbia has relatively low levels of pesticide use. We’re still working on those reports.”

If we’re going to be purely practical about salmon, the fact is that there simply isn’t enough wild salmon in the world to feed everyone. Just this week came news that [Alaska’s projected total salmon catch](#) for 2014 could be half of last year’s. Meanwhile, we are eating [three times as much](#) farmed salmon as we were in the 1980s. Farmed salmon won’t be going away anytime soon—nor should it.

“A lot of [research and development] has been put into salmon, more than any other farmed fish,” says [Paul Greenberg](#), author of *Four Fish* and the soon-to-be-released *American Catch*. “It’s a selectively bred stock, which is unusual in aquaculture. We know it really well, so to abandon it as a farmed animal seems like it’s a mistake, even though it’s carnivorous.”

The changes in the industry have been enough to convince Moonen not only to serve farmed salmon at his Las Vegas restaurant, but as of last month, he is the brand ambassador for True North Salmon Company, a farmed salmon brand within Cooke Aquaculture. It was a move that surprised many and disappointed activists like Don Staniford, director of the Global Alliance Against Industrial Aquaculture, who opposes farmed salmon and questions Cooke’s environmental [track record](#).

Moonen says he didn’t make the decision lightly.

“I looked at the salmon’s diets,” he says. “It’s farm-raised Atlantic salmon being raised in the Atlantic. The company follows their pens and allows the environment to recover. They stock the pens using low density, so the

salmon can swim more naturally, and the marine portion of their feed comes from byproducts.

“The fact is, we’ve [over-farmed our land](#). We’ve over-fished the most popular species. We’re going to need large-scale, high-quality, environmentally responsible solutions,” he says. “Aquaculture has only really exploded over the last 30 years. The farmed salmon industry needs to come together like free-range chicken or grass-fed-beef folks.”

Ocean Conservancy’s Leonard says it’s important to remember that there’s a difference between green-lighting individual farms and the effects of a collective. Scale is the question, he says, and there are still legitimate concerns.

“It’s never going to be tilapia or catfish in terms of its environmental performance,” says Leonard. “But my feeling is, it really is time for consumers to reward the better actors but at the same time keep the pressure on industry laggards to improve. It’s about identifying who is doing it better and using market pressure to bring everyone else up.”

Greenberg agrees that is important but says debate over farmed salmon and whether or not it’s time to reconsider it may be missing more vital nuance.

“I think too often fish are compared to other fish,” he says. “A more interesting question is, What if your decision was between eating farmed salmon and feedlot beef? What would you choose?”

We’d love to hear your comments. Do you eat farmed salmon? Are you reconsidering it? If the choice came down to a commodity beef hamburger or a fillet of farmed salmon, which would score the coveted space on your dinner plate?